REMARKS

Claims 1-11, 13-17, 19 and 20 are pending; claims 12 and 18 having been previously canceled..

Claims 1-11, 13-17, 19 and 20 were rejected under 35 U.S.C. §102(e) as being anticipated by Nortoft et al. (U.S. Patent No. 6,773,848). The applicant respectfully traverses this rejection for the following reason(s).

Claim 1

Claim 1 calls for, in part, *a safety circuit board disposed in an external void within said battery unit, said external void being defined as being in between the first and second secondary battery cells, the safety circuit being electrically connected to the first and second positive electrode terminals and to the first and second negative electrode terminals.*

Nortoft discloses a circuit board 5 disposed between first and second secondary battery cells, however Nortoft fails to disclose:

A. *an external void within said battery unit, said external void being defined as being in between the first and second secondary battery cells*; and

B. *a safety circuit board disposed in an external void within said battery unit.*

The Examiner has now identified what the Examiner considers to be such an *external void*

and refers us to the gap between cells 1 and 1' in Fig. 2b.

Nortoft discloses that the circuit board 5 is **sandwiched** in between the cells 1 and 1'. In this way, the circuitry on the circuit board is completely protected between the cells. In an alternative arrangement, not illustrated, both cells could be folded on top of the circuit board; again, the circuitry of the board would be protected, though the board itself would have to have a degree of rigidity because its rear surface would be exposed.

Accordingly, there is no ***external*** *void within said battery unit.* The void in Nortoft is deemed to be an internal void, or internal gap, in the battery unit as a whole.

Applicant's Fig. 3B shows an external void 49 in between the two secondary batteries 20/30.

Accordingly, the rejection of claim 1 is deemed to be in error and should be withdrawn. See claim 6 also.

Claim 2

Claim 2 calls for *a case body having a space for accommodating one of the first and the second battery bodies;* and *case cover coupled to the case body to seal the battery body contained within the case body.*

Here, the Examiner refers us to Nortoft's col. 3, line 65 through col. 4, line 5, which states:

> FIG. 1 shows a pair of flat electrochemical cells 1, 1' connected in series. The cells, which may be lithium-ion batteries or capacitors, are

> flat cells housed in flexible packages. The exact design structure of the cells is not relevant to the present application, but they may be as described in U.S. Pat. No. 5,445,856, i.e. flat wound cells housed in a thin foil laminate package.

The disclosed "flexible packages", also disclosed as "a thin foil laminate package" are not disclosed as both a case body and a case cover. The "flexible packages" can be deemed equivalent to the claimed *case body having a space for accommodating one of the first and the second battery bodies*, however there is no disclosed *case cover coupled to the case body to seal the battery body contained within the case body.*

The Examiner now argues that the flaps 14 in Fig. 6a of Nortoft correspond to the claimed *case cover.*

Note, however, that Fig. 6a is not the same *battery unit* the Examiner referred to with respect to claim1, but instead is a sixth and separate embodiment. The battery unit referred to by the Examiner with respect to claim 1 is illustrated in Figs 1a to 2b of Nortoft, and there is no case cover.

Furthermore, the flaps 14 are part of the cell package cut long. These flaps 14 will overlap end portions of circuit board 5, but do not cover the cells.

Nortoft discloses that by mechanically connecting these flaps 14 to the circuit board, a strong connection between the cell and the circuit board is achieved, so that any loads or bending stresses caused by folding of the cells will be taken by the sealing material, rather than by the cell terminals. This greatly reduces the possibility of the electrical connections between the cells and the circuit

board being damaged in the folding operation. The flaps can, for example, be connected to the circuit board by gluing or taping.

Accordingly, it is not disclosed that flaps 14 are *coupled to the case body to seal the battery body contained within the case body*. Therefore, flaps 14 do not correspond to the claimed *case cover*.

Accordingly, the rejection of claim 2 is deemed to be in error and should be withdrawn. See claim 6 also.

Claim 3

Claim 3 calls for each case body to comprise *a flanged portion, the positive and negative electrode terminals perforating the respective case at the flanged portion of the case body.*

Here the Examiner has merely referred to figs. 1b-2b of Nortoft, without identifying that area of the case body deemed to be a *flanged portion.*

Looking to Figs. 1b-2b, we find no element resembling a "flange": A protruding rim, edge, rib, or collar, used to strengthen an object, hold it in place, or attach it to another object.

There is a protruding rim illustrated, however, the case body is disclosed as being flexible and formed of a thin foil laminate. Accordingly, the protruding rim does not strengthen the case body. Nor is it disclosed that the protruding rim is used to hold it in place, or attach it to another object.

Therefore, the protruding rim, which is actually the laminate's sealing point, does not meet

any known definition of a "flange".

The Examiner identifies the same portion of Nortoft's case the applicant refers to as a rim. The Examiner does not traverse the Applicant's definition of "flange", nor does the Examiner suggest that Nortoft's rim meets the well known definition of a flange.

Accordingly, the rejection of claim 3 is deemed to be in error and should be withdrawn. See claim 7 also.

Claim 5

Claim 6 requires the first battery bodies be *helically wound positive and negative electrode plates*.

Here the Examiner refers us to Nortoft's Fig. 4e. Fig. 4e is a schematic perspective and partly sectional view of the arrangement of FIG. 4a, in a folded condition; and Fig. 4a is an exploded view of an arrangement of electrochemical cells according to a fourth embodiment of the invention.

There is no disclosure that the electrochemical cells are *helically wound positive and negative electrode plates*, and Fig. 4e does not illustrate *helically wound positive and negative electrode plates*.

The Examiner maintains Figs. 4e and 5d illustrate that the electrochemical cells are wound helically by the positive and negative electrode plates.

Note that one cannot even see the positive and negative electrode plates of Nortoft's electrochemical cells in Figs. 4e and 5d, so it is unclear what the Examiner is looking at, but clearly there are no positive and negative electrode plates illustrated in Figs. 4e and 5d.

Accordingly, the rejection of claim 5 is deemed to be in error and should be withdrawn. See claims 9 and 14 also.

Claim 10

Claim 10 also calls for *a case comprising a case body and a cover, the case body being attached to the cover* and is deemed to not be anticipated by Nortoft for the same reasons as claim 2.

The Examiner addresses this portion of the Applicant's traversal with basically the same argument made with respect to claim 2. See the Applican't continued traversal above with reagrd to claim 2 and Nortoft's flaps 14, wherein it was noted that flaps 14 cover a end portions of circuit board 5, but do not cover the cells.

Claim 10 also includes, in part, *said case body having a flanged portion that mates with said cover, said safety device being disposed in between two separate sections of said flanged portion.*

As noted with respect to claim 3, there are no elements of Nortoft's case body having a flanged portion.

Additionally, there is no *cover* as noted with respect to claim 2.

Further, there is no disclosure of *a flanged portion that mates with said cover, said safety device being disposed in between two separate sections of said flanged portion.* In Nortoft, the circuit board 5 is sandwiched between the battery cells.

The Examiner fails to address the forgoing traversal of the rejection.

Accordingly, the rejection of claim 10 is deemed to be in error and should be withdrawn.

Claim 17

Claim 17 is deemed to be patentable over Nortoft for the same reasons discussed above with respect to claim 10 with regard to the claimed features *wherein a void is formed in between flanged portions of adjacent stacked battery cells, said void being external to said sealed case, said safety device being disposed within said void..*

Additionally, it is claimed that *said safety device being disposed in such a way as to not add to the size of the battery unit.*

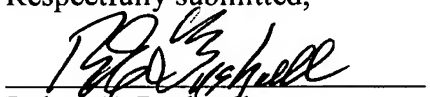
Clearly, since the circuit board in Nortoft is sandwiched between the cells 1 and 1', the thickness, thus *the size*, of the batter is increased.

Accordingly, the rejection of claim 17 is deemed to be in error and should be withdrawn.

The examiner is respectfully requested to reconsider the application, withdraw the objections and/or rejections and pass the application to issue in view of the above amendments and/or remarks.

Should a Petition for extension of time be required with the filing of this Response, the Commissioner is kindly requested to treat this paragraph as such a request and is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of the incurred fee if, **and only if**, a petition for extension of time be required **and** a check of the requisite amount is not enclosed.

Respectfully submitted,



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